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**CLAIM AMENDMENTS**RECEIVED  
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1           1.       (Currently amended) A method, comprising the steps of:

2           introducing a plurality of voids into a polymeric material, wherein the plurality of  
3       voids fill up to twenty-five percent of a total volume of the polymeric material, and the  
4       introduction of the plurality of voids into the polymeric material effects a decrease in a  
5       bulk modulus of the polymeric material without substantially altering a Young's modulus  
6       of the polymeric material;

7           buffering one or more sensor fibers having one or more stress sensitive  
8       components in abutment with a portion of the polymeric material from one or more  
9       stresses through employment of the portion of the polymeric material that comprises  
10      one or more voids of the plurality of voids; and

11          accommodating a movement of the portion of the polymeric material through  
12      compression of one or more of the one or more voids;

13          wherein movement of a portion of the polymeric material is accommodated  
14      through compression of at least one of the voids, wherein the polymeric material with  
15      the voids has a lower Poisson's ratio than the polymeric material without voids, and  
16      wherein, since the voids do not substantially alter the Young's modulus of the solid  
17      material, a decrease in the Poisson's ratio results in a decrease in the bulk modulus of  
18      the polymeric material.

1           2.       (Original) The method of claim 1, wherein the step of introducing the  
2       plurality of voids into the polymeric material comprises the steps of:

3           adding the plurality of voids into a resin of the polymeric material; and

4 curing the plurality of voids and the resin to create a potting compound that  
5 comprises the plurality of voids.

1 3. (Original) The method of claim 2, further comprising the steps of:  
2 encapsulating one or more of the one or more stress sensitive components in the  
3 potting compound; and  
4 accommodating an expansion of the one or more stress sensitive components  
5 through compression of the one or more of the one or more voids.

1 4. (Previously presented) The method of claim 1, wherein the plurality of  
2 voids are contained within a plurality of hollow compressible microballoons, and wherein  
3 the step of introducing the plurality of voids into the polymeric material comprises the  
4 step of:  
5 adding the plurality of hollow compressible microballoons to the polymeric  
6 material.

1 5. (Previously presented) The method of claim 4, wherein the compressible  
2 microballoons comprise a thin polymer wall that encapsulate a gas, and wherein the thin  
3 polymer wall promotes a reservation of space in the polymeric material for the gas, the  
4 method further comprising the step of:  
5 accommodating the movement of the one or more stress sensitive components  
6 through compression of the gas which allows a partial collapse of the thin polymer wall.

1           6.       (Previously presented) The method of claim 4, wherein the step of adding  
2 the plurality of hollow compressible microballoons to the polymeric material comprises  
3 the steps of:

4           employing a coupling agent to promote an adhesion between the plurality of  
5 hollow compressible microballoons and the polymeric material; and

6           employing the coupling agent to promote a decrease in a settling rate of the  
7 plurality of hollow compressible microballoons in the polymeric material.

1           7.       (Withdrawn) The method of claim 1, wherein the plurality of voids are  
2 contained within a plurality of hollow compressible microfibers, wherein the step of  
3 introducing the plurality of voids into the polymeric material comprises the steps of:

4           adding the plurality of hollow compressible microfibers to the polymeric material;  
5 and

6           creating a plurality of void channels in the polymeric material.

1           8.       (Withdrawn) The method of claim 1, wherein the plurality of voids  
2 comprise a plurality of gas bubbles within the polymeric material, wherein the step of  
3 introducing the plurality of voids into the polymeric material and the step of buffering the  
4 one or more stress sensitive components in abutment with the portion of the polymeric  
5 material from the one or more stresses through employment of the portion of the  
6 polymeric material that comprises the one or more voids of the plurality of voids  
7 comprise the step of:

8 spraying the polymeric material through an aerator component to introduce the  
9 plurality of gas bubbles into the polymeric material and to apply the polymeric material  
10 with the plurality of gas bubbles to the one or more stress sensitive components.

1 9. (Withdrawn) The method of claim 1, wherein the plurality of voids  
2 comprise a plurality of gas bubbles within the polymeric material, wherein the step of  
3 introducing the plurality of voids into the polymeric material comprises the steps of:  
4 mixing the plurality of gas bubbles into the polymeric material; and  
5 employing an air-entrainer to stabilize the plurality of gas bubbles in the  
6 polymeric material.

1 10. (Withdrawn) The method of claim 1, wherein the plurality of voids  
2 comprise a plurality of gas bubbles within the polymeric material, wherein the step of  
3 introducing the plurality of voids into the polymeric material comprises the steps of:  
4 adding a chemical blowing agent to the polymeric material;  
5 increasing the temperature of the chemical blowing agent;  
6 releasing the plurality of gas bubbles from the chemical blowing agent into the  
7 polymeric material once the chemical blowing agent reaches a decomposition  
8 temperature; and  
9 trapping the plurality of gas bubbles within the polymeric material.

1 11. (Withdrawn) The method of claim 1, wherein the plurality of voids  
2 comprise a plurality of gas bubbles within the polymeric material, wherein the step of  
3 introducing the plurality of voids into the polymeric material comprises the steps of:  
4 placing a diffuser component substantially at a bottom of a container;

5 filling a portion of the container with the polymeric material;  
6 activating the diffuser component to begin to release the plurality of gas bubbles  
7 into the polymeric material;  
8 raising the diffuser component through the polymeric material to a position  
9 substantially at a top of the container; and  
10 curing the polymeric material to preserve the plurality of gas bubbles within the  
11 polymeric material.

1 12. (Withdrawn) The method of claim 1, wherein the step of introducing the  
2 plurality of voids into the polymeric material comprises the steps of:  
3 adding a plurality of dissolvable microstructures to the polymeric material; and  
4 dissolving the plurality of dissolvable microstructures through an increase in  
5 temperature of the plurality of dissolvable microstructures to leave the plurality of voids  
6 in the polymeric material once the plurality of dissolvable microstructures reach an  
7 activation temperature.

1 13. (Withdrawn) The method of claim 1, wherein the plurality of voids  
2 comprise a plurality of gas bubbles within the polymeric material, wherein the step of  
3 introducing the plurality of voids into the polymeric material and the step of buffering the  
4 one or more stress sensitive components in abutment with the portion of the polymeric  
5 material from the one or more stresses through employment of the portion of the  
6 polymeric material that comprises the one or more voids of the plurality of voids  
7 comprise the steps of:

8 applying the polymeric material to the one or more stress sensitive components  
9 with a brush that comprises a plurality of hollow bristles; and  
10 introducing the plurality of gas bubbles from a gas supply into the polymeric  
11 material through the plurality of hollow bristles.

1 14. (Previously presented) The method of claim 1, wherein the step of  
2 buffering the one or more sensor fibers having the one or more stress sensitive  
3 components in abutment with the portion of the polymeric material from the one or more  
4 stresses through employment of the portion of the polymeric material that comprises the  
5 one or more voids of the plurality of voids comprises the steps of:

6 forming a pressure-sensitive foam tape from the polymeric material with the  
7 plurality of voids;

8 applying a portion of the pressure-sensitive foam tape to the one or more stress  
9 sensitive components; and

10 encapsulating the portion of the pressure-sensitive foam tape and the one or  
11 more stress sensitive components with a potting compound.

1 15. (Original) The method of claim 1, wherein the step of accommodating the  
2 movement of the portion of the polymeric material through compression of the one or  
3 more of the one or more voids comprises the step of:

4 allowing compression of one or more of the one or more voids in response to an  
5 applied force to promote a decrease in a response force from the portion of the  
6 polymeric material to one or more of the one or more stress sensitive components.

1           16. (Withdrawn) A method, comprising the steps of:  
2           introducing a plurality of voids into a potting compound;  
3           encapsulating a fiber optic sensing coil of a fiber optic gyroscope with a portion of  
4           the potting compound that comprises one or more voids of the plurality of voids; and  
5           promoting a decrease in a bias error of the fiber optic sensing coil though  
6           accommodation of an expansion of the fiber optic sensing coil by a compression of one  
7           or more of the one or more voids.

1           17. (Withdrawn) The method of claim 16, wherein the plurality of voids are  
2           contained within a plurality of hollow compressible microballons, wherein the step of  
3           introducing the plurality of voids into the potting compound comprises the step of:  
4           adding the plurality of hollow compressible microballons to the potting compound.

1           18. (Withdrawn) The method of claim 16, wherein the step of promoting the  
2           decrease in the bias error of the fiber optic sensing coil though accommodation of the  
3           expansion of the fiber optic sensing coil by the compression of the one or more of the  
4           one or more voids comprises the step of:  
5           promoting a decrease in a strain on the fiber optic sensing coil due to a contact  
6           between the fiber optic sensing coil and the potting compound by the compression of  
7           the one or more of the one or more voids upon the contact.

1        19. (Withdrawn) A method, comprising the steps of:  
2        introducing a plurality of voids into a polymeric material;  
3        coating one or more stress sensitive components with a portion of the polymeric  
4        material that comprises one or more of the plurality of voids; and  
5        accommodating an expansion of the one or more stress sensitive components  
6        through compression of one or more of the one or more voids.

1        20. (Withdrawn) The method of claim 19, wherein the plurality of voids are  
2        contained within a plurality of hollow compressible microballons, wherein the step of  
3        introducing the plurality of voids into the polymeric material comprises the step of:  
4        adding the plurality of hollow compressible microballons to the polymeric  
5        material.

1        21. (Previously presented) The method of claim 1, wherein the step of  
2        buffering the one or more sensor fibers having the one or more stress sensitive  
3        components comprises the steps of:  
4        encapsulating a fiber optic sensing coil within the polymeric material that  
5        comprises the plurality of voids, wherein the fiber optic sensing coil comprises a first coil  
6        portion and a second coil portion, and wherein the first coil portion is adjacent to the  
7        second coil portion; and  
8        locating one or more of the plurality of introduced voids between the first coil  
9        portion and the second coil portion.



1           22. (Previously presented) The method of claim 21, wherein the first coil  
2           portion comprises a first layer of the fiber optic sensing coil, and wherein the second coil  
3           portion comprises a second layer of the fiber optic sensing coil; and  
4           wherein the step of locating one or more of the plurality of introduced voids  
5           between the first coil portion and the second coil portion comprises the step of:  
6           locating one or more of the plurality of introduced voids between the first layer  
7           and the second layer.

1           23. (Previously presented) The method of claim 21, wherein the fiber optic  
2           sensing coil comprises a layer of a plurality of optical fiber windings, and wherein the  
3           first coil portion comprises a first optical fiber winding of the plurality of optical fiber  
4           windings, and wherein the second coil portion comprises a second optical fiber winding  
5           of the plurality of optical fiber windings; and  
6           wherein the step of locating one or more of the plurality of introduced voids  
7           between the first coil portion and the second coil portion comprises the step of:  
8           locating one or more of the plurality of introduced voids between the first winding  
9           and the second winding.

1           24. (Previously presented) The method of claim 2, wherein the step of adding  
2           the plurality of voids into the resin of the polymeric material further comprises the step of  
3           adding the plurality of voids into the resin of the polymeric material in a substantially  
4           uniform distribution.

1           25. (Previously presented) The method of claim 1, wherein the plurality of  
2 voids comprise a diameter that is smaller than a distance of separation between  
3 adjacent portions of the one or more sensor fibers.

1           26. (Previously presented) The method of claim 25, wherein the diameter of  
2 each of the plurality of voids is less than fifty micrometers.

1           27. (Previously presented) The method of claim 1, wherein the plurality of  
2 voids fill ten percent of the total volume of the polymeric material.